DOCUMENT RESUME

ED 170 319 TM 008 460

AUTHOR Reid, Neil
TITLE Standards, Basics and National Assessment. Set 78. Number one. Item 13.
INSTITUTION New Zealand Council for Educational Research, Wellington.
PUB DATE 78
NOTE 13p.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Achievement; *Academic Standards; Basic Skills; *Educational Assessment; Educational Research; Educational Trends; Elementary Secondary Education; Foreign Countries; National Norms; *National Programs; Norm Referenced Tests; Performance Factors; *Standardized Tests; *Testing Programs
IDENTIFIERS New Zealand

ABSTRACT

Educational standards, student achievement and basic skills are discussed. Various definitions of standards are given, and a definition which encompases individual differences is preferred. Educational research conducted in New Zealand indicates that there has been no sharp decline in academic achievement, although in primary- and intermediate-grade subjects which were previously taught by rote, there has probably been a decline in attainment. Standardized tests, which are not specifically designed to measure performance over time, were used in most of the studies cited. Changes which were not taken into account in comparing academic achievement over the past several decades include: (1) school population; (2) test suitability over a period of time; (3) classroom factors, such as class size and teacher quality; (4) curriculum content; (5) societal changes, such as family environment, urbanization and the impact of television; and (6) the job market. In order to gather reliable and objective information to assess achievement and to set national standards, a proposal is made to administer nationally standardized tests at five-year intervals in basic subjects at specific points of the primary and secondary courses. Presently, national standardized tests are available on an optional basis for all class levels from Standard I upwards. (MH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Item 13

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

K. A. Pickens

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

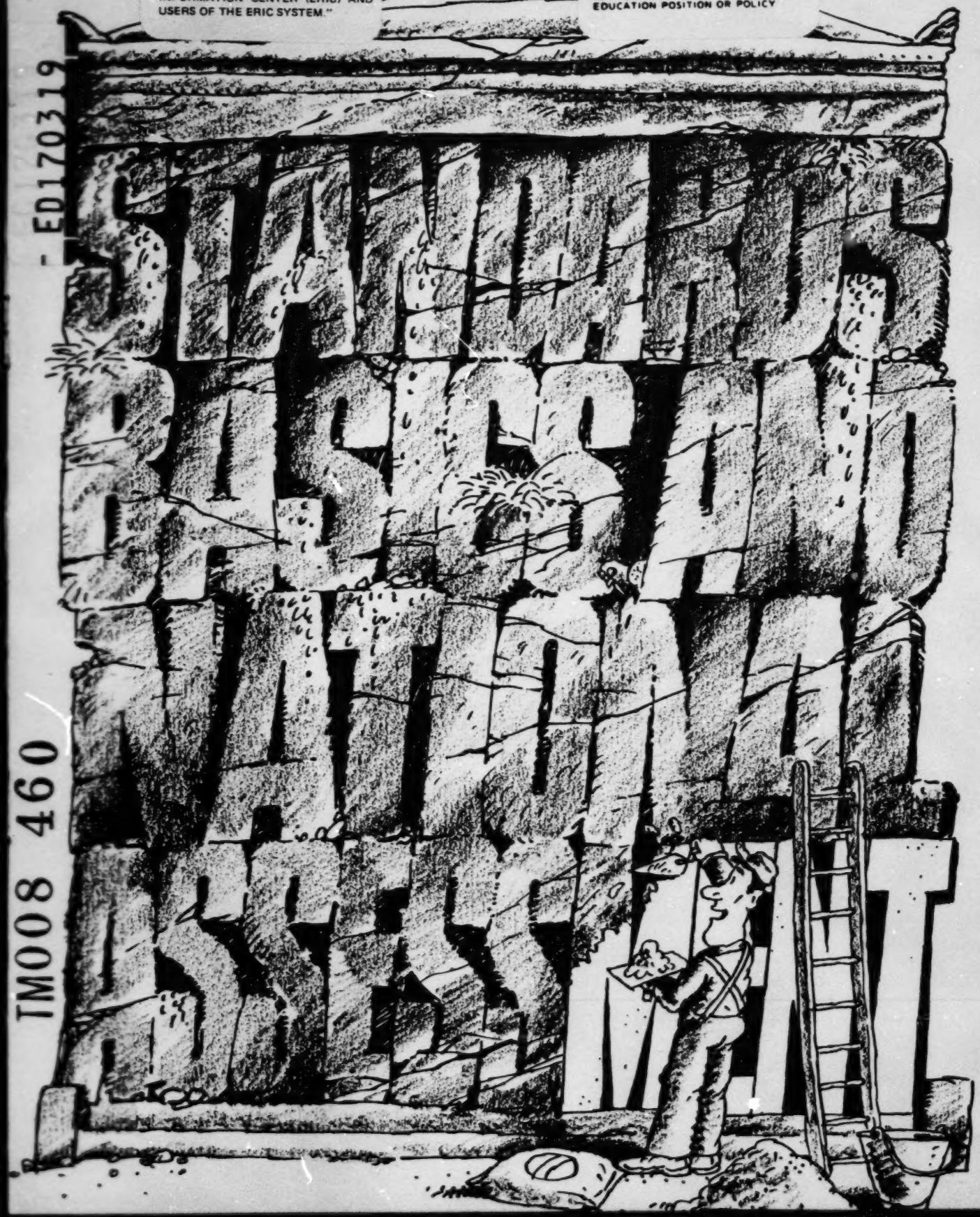
U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

set 78
number one

- ED170319

TM008 460



Standards, Basics and National Assessment

by Neil Reid,
NZCER

'Standards in our schools have declined drastically! Children can't calculate, can't read and can't write like they used to. Let's cut out all these educational frills, this progressive rubbish and get back to basics — then we'll get young people who can pull their weight in the work force. And a bit of good, old-fashioned discipline wouldn't go astray, either!'

How often lately have you heard sentiments of the above kind expressed? It seems to be the rule that in times of widespread public discontent criticism of the educational system reaches a vociferous peak, as though the schools were somehow solely responsible for all our economic difficulties and social ills.

Of course, it is proper that citizens should be concerned about the work of the schools, and right that they should be able to satisfy themselves that their tax dollars are being well spent, but what evidence is there that scholastic standards have declined? More to the point, what are standards and what is meant by the catch phrase 'getting back to basics'?

What are standards?

Let's begin by defining what a standard is. The dictionary gives two applicable meanings: 'the degree of excellence required for particular purposes' and 'the measure of what is adequate; a socially or practically desired level of performance'. There is also a third popular meaning of an 'actual level of performance'.

Standards as objectives

When we state what the student must actually do, how well and how often, we are using the word in its first sense. For example, 'Using a manual typewriter, the pupil will be able to type at least 35 words per minute with no more than 2 typographical errors per 50 runnings words', or 'The pupil can sum correctly at least 80 percent of 20 pairs of 3 digit numbers randomly generated by the teacher'. These are performance standards and work very well for simple (some say trivial) skills and behaviour. However, it is obviously difficult to apply this concept of standards as objectives in many areas of the school programme. For example, how would one define a level of performance for writing a haiku poem? (Perhaps the schools shouldn't be encouraging children to write poetry?) Or producing a novel or inventive solution to a complicated social problem? (Why are our children permitted to study social problems?) In these kinds of situations, which occur very frequently, standards are rarely explicitly defined, and it is usually left up to the teacher to decide whether or not a student's performance or product is 'up to standard'. (Assuming of course, that there is one acceptable standard for *all* pupils, regardless of individual ability or circumstance).

Standards as expectations

In the second sense of the word a standard is an expectation, a belief about what 'should be'. Now beliefs and expectations are, in the nature of things, very subjective and personal, differing from one individual to another and changing as individuals move from one situation or circumstance to another, grow older, and so on. Consequently, what one individual will find acceptable, that is, 'up to standard', another will not. And then there is the whole question of whether expectations are realistic or not. As far as school achievement is concerned, most people probably derive their expectations or beliefs from their own school days; if these ended some time ago then memories of what the levels of academic performance actually were 30, or even 20, years ago may be a little less than accurate. It is always easy to view the past through rose-coloured spectacles, but if we do we are almost bound to conclude that 'standards are not what they used to be'.

It is also very natural for parents to want their children to do better and achieve more than they did themselves. But parents (and teachers) should always ask themselves whether their expectations, for children of a particular age and level of development are realistic, that is, capable of achievement. And they also have to ask if their expectations for a particular child are realistic, keeping in mind Frank Lopdell's remark that 'some criticisms of modern standards are in reality criticisms of the distribution of natural ability in the community'.

Standards as levels of actual performance

The term standard is also commonly used in the sense of an actual, reported level of performance. Defined in this way the word can be very dangerous and misleading, particularly in interpreting evidence of educational achievement, and particularly evidence taken from standardized tests.

Norms are not standards

Most of the surveys of pupil achievement undertaken in the past in New Zealand and overseas use norm-referenced standardized achievement tests[1] as the measuring tool. Tests of these kinds report the achievement of individual pupils in relation to that of their age or class peers, the age or class score being referred to as the norm.

The norm, in other words, is the typical (average) performance of a representative sample of children. Norms are essentially a description of what is, rather than a prescription of what should be. Thus, although the name standardized test may, rather unfortunately, suggest it, these tests do not state the standards of performance that can be expected of every child. But it is an easy step to start calling the norm, or average performance, the standard. And if this is done then, hey presto, half the pupils in the schools will be, automatically, 'below standard'.

Pressure is frequently exerted on teachers and pupils to attain the norm, that is, the average for the class or age

group, and they may strive valiantly to do so. But it's a battle that can't be won for test publishers monitor the results of their tests and the moment that the mean performance increases and stabilizes at a higher level the tests are re-normed so that, once again, half the pupils in the national sample are above the norm and half below or, as some misguided people say, 'below standard'.

This loose, though prevalent use of standard as synonymous with norm is to be abhorred, and the teacher's manuals for the various *Progressive Achievement Tests*, published by NZCER and the most commonly used tests in New Zealand schools, have a section devoted exclusively to cautioning teachers about this mistaken belief.

Three kinds of standards

If we are to talk meaningfully about the question of standards and attempt to assess them, it is vital that we have a satisfactory definition of the term. When this is attempted it becomes evident that reliable and objective evidence can only be presented for definition one, that is, standards as objectives. Where standards are tightly defined, as in the examples provided earlier, we can develop appropriate tests and other measuring instruments which will allow us to determine whether or not they have been reached. The subjectivity involved in formulating expectations, the second and very common use of the term, however, seems to preclude rigorous investigation. And we can speak about and measure mean (or average) levels of test performance over time, the third definition provided. But we have to be very careful not to fall into the error of equating norms and standards. Norms or average scores reveal what *is*, not what should *be*, and therefore are *not* standards.

Who sets standards?

Where do standards (however defined) come from in the school context? Who sets them? Well, often the teachers do, but this hasn't always been the case. A hundred years ago standards were explicitly defined[2] and all pupils were expected to attain them ('all scholars in fair attendance shall be expected to pass one standard') or they did not progress through the school. Thus, for example, at Standard 2, for Reading, the pupil was expected to read 'Sentences containing words of two syllables, and easy words of more than two syllables, to be read intelligently, and the meanings of the words to be known', and for Standard 5, in Writing, 'Small-hand copies in a strict formal style, and text-hand; transcription of verse in complicated metres, and of prose exhibiting the niceties of punctuation'. The regulations clearly stated: 'The standards shall not be understood to prescribe to the teacher the precise order in which the different parts of any subject shall be taught, but as representing the minimum of attainments of which the Inspector will expect evidence at each stage of a scholar's progress'.

And at the end of the primary school, guarding the entry to secondary education, were the Proficiency Examinations, designed to ensure that pupils possessed a minimum level of attainment in the basic tool subjects of reading, writing, spelling, grammar, composition and arithmetic. It is a little known fact, however, that these guardians of standards varied considerably from district to district. They also changed over time as well. Hogben apparently intended that about one third of primary school leavers would obtain the Proficiency Certificate. But many more than this passed, far beyond anyone's expectations. The examination was made more difficult. Even so, in 1912, 77 per cent of the candidates passed and for several years after that the pass rate averaged 70 per cent. No doubt teachers in those days did exactly as they do today if pressured to produce examination results — they teach to the tests and that is all they teach. And who can blame them?

The official view

The *Handbook on School Administration*, 1964, and the revised 1975 edition, published by the Department of Education as a guide for primary and intermediate principals, devote barely a page to the question of standards. But the statements in both places are drawn from that farsighted 1944 publication *Education Today and Tomorrow*. Virtually identical, they affirm that standards are fundamental to education and they conceive of them in a broad way. The extracts below are from the 1975 edition.

> Standards and the attitude to work are no less important today than they ever were, but educational achievement in the narrow sense of quality in the formal skills alone is no longer sufficient, and standards are considered in a broader and more complex way. In the first place, they are more generally regarded as applying to the whole of the child's life and work at school — not merely to measurable results in the three R's, but also to the quality of his performance over the whole range of the curriculum. Second, there is a greater effort to relate what is expected of a child to his capacity, a greater realisation of the fact that a standard that is adequate for the average child will be too exacting for some and insufficiently demanding for others. Third, there is a stronger disposition to look behind the objective result to what it really means in the child's life . . .
>
> (a) That standards are fundamental to education, no less in the newer subjects than in the old tool subjects . . .
> (b) That hard work cannot and should not be eliminated from true education but it should be on tasks that have a meaning for the child; and
> (c) That there is nothing incompatible between good standards in the tool subjects and the full acceptance of the modern tendencies (in education). Hundreds of good schools in New Zealand have proved this in the past ten years.
>
> There is nothing whatever in a sane, modern concept of education that condones poor standards of work. Shoddy workmanship on the part of either teacher or child is as intolerable now as it was thirty years ago. (Sections 9.10.1 and 9.10.2)

Standard or standards?

It will be readily appreciated that, if standards are seen as modifiable in the light of a child's abilities and circumstances, then talking about *a* standard as though there was a uniform standard for all, is nonsense. This is the whole problem in setting standards. To set *a* standard, is to define a goal which is to be aimed at by all. Yet we know that people differ in their abilities, and that some will always excel. If we set a standard for the bulk of the pupils, for the average child, then the standard will be attained easily by some, others will get there after something of a

struggle and for quite a number (something like 40 per cent) the standard will be unattainable and so for them unrealistic.

Teachers are well aware of this problem, and the strategy has been to try and set attainable goals for individual pupils, that is, set individual levels of achievement. So conceivably there could be as many standards for a subject as there are pupils — a far cry from the situation that prevailed in 1878 and for some years after, when there was only one standard at each class level, handed down by authority, fixed and immutable, which all pupils had to attain before they were permitted to enter the next class.

The 'evidence' from research

There are, as it happens, a number of studies and surveys that seem to throw some light on the question of changing levels of performance in New Zealand, and those carried out during the last 50 years are described below. Unfortunately, the problems of interpretation are such that only the most tentative of conclusions can be drawn from these investigations.

The other thing to note is that none of these studies was part of a systematic or planned attempt to monitor educational standards over time. Some are standardization exercises, others degree projects, still others the by-products of institutional studies. And some are Department of Education surveys, usually put in train at times when criticism of the schools had reached a higher level than usual. The results of these departmental studies, incidentally, were widely publicized. The critics, however, remained unconvinced, the more sceptical pointing out, perhaps unkindly, that the Department was sitting in judgement on itself.

Spelling

In 1931 Ralph Winterbourn administered the *Burt Graded Spelling Test* to all 9 to 15 year old children in Christchurch — a total of 4000 children. In 1948 the exercise was repeated in the same schools by Francis, who found a small improvement at the 9 year old level but declines in performance at all other levels. Francis speculated that with the abolition of Proficiency in 1936 the rote learning of spelling had been de-emphasized, hence the drop in spelling attainment.

A decade later, in 1958, John Watson surveyed the spelling performance of Christchurch 12 year olds, in the course of his study of intermediate schools. He compared his 1958 results with those of Winterbourn's 1931 and Francis' 1948 sample and found that the average spelling performance at this age level had deteriorated by 5 per cent over the 27 year interval and by 2 per cent over the 10 year period. Part of this decline, however, was considered to be due to the fact that the *Burt* test (constructed about 1914) contained several words which were no longer in common use.

Further studies of spelling worthy of mention are those by Nicholson and Freyberg. Nicholson studied the spelling performance of Auckland children in Standard 2 to Form II over the period 1952 to 1970. He found that children were writing more in 1970 than in 1952 and for the two lower classes the percentage of errors in relation to the total number of words had declined, that is, spelling had improved. At the upper class levels the percentage of errors had increased marginally, that is, spelling had deteriorated. The interpretation of the Auckland data is equivocal, however, since the influx of Polynesian pupils in the second survey could well have distorted the picture. Freyberg's study of Standard 3 children in the Palmerston North area in 1960 and again in 1972 showed that on a dictated spelling test of 40 words there was a significant increase in the average number of errors. He also found, as did Nicholson, that children were writing more in 1972, but that they were making slightly more errors.

Thus, while all of the studies of spelling attainment tend to show a decline in performance, some of them also reveal improvements in levels of attainment at certain class levels. But, on the whole, it does appear that levels of attainment may have fallen, at least in the regions so far studied, but by how much nationally, and for what reasons, is anybody's guess.

The language arts

In 1955 Arthur Fieldhouse reported, in *National Education*, the results of his New Zealand standardization of the Australian Council for Educational Research *Reading for Meaning*, *World Knowledge* and *Speed of Reading* tests.

He found that in reading comprehension New Zealand children were about a year ahead of their Australian age peers and attained at much the same level in the vocabulary test with 'a general tendency for New Zealand medians to be slightly superior, age for age'. (p. 42). The comparison of performance on the speed reading test was, for a variety of reasons, more difficult to draw, but Fieldhouse concluded cautiously that New Zealand showed an initial superiority at age 9 with the position reversed at age 12, Australian children scoring marginally better at this level.

Two years later the Minister of Education, the Hon. P.O.S. Skoglund, asked his Department to report to him on standards in English and arithmetic. Inspectors consulted experienced teachers, considered data in official records and, in order to make equitable comparisons between past and present standards, administered standardized tests (including some administered by McKenzie in 1927) under the guidance of Parkyn, then Director NZCER. Since interest was to be focussed on the end-product of primary schooling, a sample of 12 year olds in Forms I and II was selected to take the tests. The results of the 1958 testing were compared with those from 1927, 1931, 1934, 1948, 1952 and also with the published overseas norms. The final report was described by the Minister in his departmental report for 1959 as 'the largest body of fact and informed opinion on primary school standards in English and arithmetic that had been assembled for many years.' (p. 28) What did this mass of data reveal? Levels of attainment in reading comprehension were higher than ever before and 'considerably higher' than those of their counterparts in Britain and Australia. In the inspectors' opinion written English had increased in volume and variety and this written expression was considered to be more sincere, direct and simple with no apparent change in standards of formal correctness. Oral English was judged as 'undoubtedly

improved'; children spoke naturally, sincerely and effectively although the quality of their diction had not improved as markedly. The subjective reports and the objective evidence from tests gave good grounds for believing that 'the gains of a liberalized curriculum have been secured without general losses in the basic skills'. (E.1, 1959, p. 29)

In 1965 the Department of Education surveyed the same schools which had taken part in Fieldhouse's 1952 standardization of the *ACER: Reading Tests* using two of the three reading tests, *Reading for Meaning* and *Word Knowledge*. This second study, 13 years later, revealed that little change had occurred in the average scores although there were some variations at the extremes. The report states:

> overall standards in reading have been maintained, and that by the time the children reached the age of 12 years, the attainment in the most essential reading skills is higher for 80 per cent of the children than it was 13 years ago. (E.1, 1965, p. 14)

The IEA studies

The IEA cross-national studies of 1970 to 71 are frequently cited as providing evidence of New Zealand children's superiority in several subject areas, notably reading comprehension, science and literature. Much less is said about other aspects of reading, which were also tested, and about French as a foreign language, in which New Zealand children at the two levels tested did rather less well. Criticism has been levelled at these surveys, both in terms of the validity and reliability of the tests and other measures used, the selective use of the evidence, and the manner in which the results for 14 year olds and Form VII students are generalized to 'New Zealand children'. However, while deploring these aspects, (including the rather invidious international comparisons which are inevitably made), one must concede that, compared with many other nations, New Zealand Form IV and VII pupils did demonstrate better than average achievement in three of the areas surveyed: reading comprehension, literature and science.

The PAT reading tests

In 1968 NZCER standardized the first two tests in the *Progressive Achievement Test* series. These were measures of achievement in reading comprehension and reading vocabulary. The tests were administered to a nationally representative sample of 7000 children aged 8 to 14 to establish norms for the test. Six years later, as part of a periodic check on the normative data, the same schools which took part in the 1968 standardization were asked to supply their 1974 test results for analysis. Comparable samples at each age level were drawn and the test scores analysed. Apart from a statistically significant increase in score at the Standard 2 level for reading comprehension (in part probably due to increased test sophistication) and a slight decline overall in mean scores for vocabulary, there was very little shift in average scores over all age levels on the two tests, certainly not sufficient to warrant re-norming the tests in question.

On the whole, the evidence indicates that levels of attainment in reading comprehension may have been improving, although the most recent piece of reliable evidence does show that mean scores have remained virtually stable between 1968 and 1974.

Listening skills

To obtain information that would enable a decision to be made on whether it was necessary to update the norms for the *PAT: Listening Comprehension Test*, NZCER invited the 228 schools that had participated in the 1970 national standardization of this test to provide results from their 1977 testing programmes for analysis. The data for approximately 7000 children indicated that, over all class levels from Standard 1 to Form III, there was a very small but consistent decline in performance on the skills sampled by these listening comprehension tests. The shift in mean performance was judged to be so minor, however, that re-norming is not justified at this time. So, for all practical purposes, measured levels of attainment in listening comprehension have remained steady, and only the passage of time can tell us what meaning, if any, to attach to the evidence of decline uncovered during 1977.

Arithmetic

The 1955 standardization, by Fieldhouse, of the *ACER: Arithmetic Test* (Form C) showed, with the exception of Queensland children who were superior to children in all Australian states as well as in New Zealand, that standards of attainment in the four basic operations with whole numbers did not vary at all between Australia and New Zealand over the 9 to 12 year age range. He concluded that the better attainment of New Zealand children in reading (reported above) had not been gained at the expense of inferior standards in mechanical arithmetic. Similarly, the 1958 departmental survey suggested that levels of attainment in the basic processes of arithmetic were much the same for New Zealand children as for Australian and British children, and there had been little change over the years. Three regional studies of mechanical arithmetic and rules undertaken by Watson in the same year also showed no change, or a slight improvement over periods ranging from 10 to 31 years. By the 1970s, however, the situation appears to have altered, for a small-scale validation study conducted by NZCER in 1973, as part of the development of the *PAT: Mathematics Tests* and using the *ACER: Arithmetic Test* (Form C), indicated that overall scores in mechanical arithmetic for a sample of Standard 3 pupils in Dunedin and Form I pupils in Auckland had dropped since 1956. Addition was least affected, subtraction rather more so, multiplication quite markedly and division seriously.

A more optimistic assessment, however, can be found in a report of a Hogben House Conference held in 1974, titled *Evaluation of Teaching Mathematics in Primary Schools* which cites evidence from surveys undertaken with the *ACER [AM] Mathematics Tests* in two districts to provide information about the mathematical achievement of pupils. It is not altogether clear from statements in Part II of the report as to the actual composition of the samples but they were small and probably not representative of New Zealand children at the class (Standards 3 and 4) levels studied. Nonetheless, the meagre evidence is generalized (despite a

note, p. 5, that the problem of overgeneralization is understood) to New Zealand pupils, Part I of the report stating:

> Finding 5: It appears that levels of mathematical achievement of New Zealand pupils are very satisfactory. Their performance on a set of overseas tests that were normed recently indicate that New Zealand pupils are performing at markedly higher levels in most topics than the pupils (children in the State of Victoria) on which the test was normed.
>
> Finding 6: Evidence presented at the course indicated that computational efficiency can be improved markedly by regular purposeful practice.
>
> Finding 7: There was evidence that pupils have a favourable attitude towards mathematics.

This latter finding is based on evidence from two attitude surveys, both conducted in the Wellington district. Clark, using a 7-point Likert Scale, decided that her results indicated that Form II children in Wellington intermediate schools liked mathematics, felt it was a relevant study for them now and that it would be useful in later life. Clark's interpretation, however, seems very open to question, for means only slightly above the neutral position were taken as representing 'very favourable attitudes'. Paske surveyed a 'wide range of pupils from Standard 3 to Form II'. Part II of the report states her findings: 'The majority of the pupils questioned liked mathematics; felt that they do well in it, and considered that it is an important subject.' (p.8) On the other hand, Jackson discovered recently, while preparing a study habits and attitudes inventory for secondary school pupils, that the sample of Form IV and V students surveyed regarded mathematics as their most detested subject although its usefulness was recognized. So the question of whether or not New Zealand pupils like mathematics any better now than they did in the past is still very much open.

Evidence from a further survey of 200 pupils in the Hawkes Bay area using the *ACER: Arithmetic Test* (Form C) is summarized in Part II of *Evaluation of Teaching Mathematics in Primary Schools* as follows: 'There appears to have been little change in levels of performance measured by the test over the past 4 years. Standards in addition and subtraction remain satisfactory. Standards in multiplication and division are lower than those obtaining when the test was normed.' (p. 3) The researchers, however, consider the ACER test as 'an unsatisfactory instrument since it was designed at the time when computational proficiency was the major aim of the arithmetic syllabus, and many of the conventions used are strange to pupils reared on the new syllabuses.' (p. 5) This last claim, it should be noted, deserves very close examination.

In 1973, Spence used the same ACER test with 100 Form II intermediate school pupils in the same district and found that in all 4 arithmetic tests the 1973 sample (mean age 13.3 at time of testing) scored significantly lower than the oldest group (12.6 to 12.11 year olds) tested in 1956. The pattern was remarkably similar to the NZCER validation study mentioned earlier. Three years later Brownrigg investigated the competency in the 4 basic operations with whole numbers of a sample of 1137 Form II children in 10 different intermediate schools in the greater Wellington district, again using the *ACER: Arithmetic Test* (Form C). Her results showed that the standardization pupils in 1956 were markedly superior to their 1976 counterparts. The pattern was the same as for the Spence and NZCER studies. Interestingly, she also found that girls' performance had deteriorated less than boys'. In discussing her findings in the light of the impact of 'new maths' she observes: '. . . the public will continue to judge a child's mathematical ability by how quickly (and effectively) he can add or multiply, not by how efficiently he can show that $A \cap B = \emptyset$. (p. 16).

Computational skills versus understanding

The research findings suggest, as might have been anticipated, that in the changeover from arithmetic to mathematics there has been a decline in children's computational skills. Against this, there is some scanty evidence from one region that there may have been some improvement in primary pupils' attitudes towards mathematics and that today's pupils probably have a greater understanding of mathematical ideas and processes.

Other evidence

Two other studies, of a more general kind, can also be cited. In 1954 and 1964 Hounsell made a study of a group of compulsory military trainees aged 18 to 21 years. Both groups took the *Army General Service Battery* consisting of tests of verbal and non-verbal intelligence, arithmetic, mechanical ability and attention to detail. Despite some differences in the groups, tentative comparisons were possible and these suggested that the educational attainment levels of the trainees had risen during the ten year interval.

Four years later, in 1968, the *Otis Test of Mental Ability* (Intermediate) was re-normed by NZCER on a national sample of 6000 9 to 15 year olds, and the results compared with those of the 1936 standardization. The trends showed an unmistakable rise in scores at all age levels, approaching one year of mental age. As the *Otis* test puts a heavy premium on verbal, numerical and reasoning skills, and its results correlate highly with those of reading tests, this finding provides indirect evidence that the basic skills underlying academic achievement were improving over the intervening years.

Finally, there is some evidence of improvements in the levels of performance for Form VI pupils and university students. Renwick, for example, cites the fact that the percentage of pupils in each age group entering secondary school and gaining University Entrance has doubled during the period 1951 to 1976 (from 13 per cent to 26 per cent), and quotes statistics compiled by the Vice-Chancellors' Committee which, he states, indicate that 'those who go on to university are in general better prepared than before, and more of them are completing degress in minimum time allowed.' (p. 6) Cynics, of course, would probably say that this is simply because standards in the universities have been lowered.

Some gains: some losses

On the whole, the evidence, meagre as it is, tends to suggest that in the primary and intermediate schools there has probably been a falling off in attainment in spelling and

computational skills, subjects which were often taught in the past by rote learning methods. On the other hand, children may now have a better understanding of mathematical principles, but it is yet to be demonstrated that they like the subject any more than their parents or grandparents did.

As for reading comprehension, there is evidence that gains have been made but we don't know if the levels of attainment in the schools are keeping pace with, or lagging behind, the ever increasing levels of reading comprehension that our complex society requires of its citizens and workers. About other subjects taught at the primary level we can say nothing.

For the secondary and post-secondary levels there are very few studies of any kind available, but those we do have certainly contain no conclusive evidence of declining attainment. And, indeed, if we can draw any general conclusion at all from the research studies — primary and post-primary — it must be that there is no evidence of any drastic or across the board decline in academic attainment.

Yet I doubt if this verdict will satisfy the critics. Men and women in responsible positions in many walks of life will continue to state, quite categorically, that standards are falling and that the education system is in need of a thorough overhaul. There is no evidence that this is so, and instead of teachers getting defensive when these kinds of statements are made I would like to see the tables turned. Why not ask the critics what their evidence is? Let's see how reliable and objective it is. Or is it just personal feeling, political clap-trap, a distaste for the way New Zealand society is developing?

Limitations of the evidence

Having stated that there is no evidence of any drastic decline in standards it is necessary to point out that nearly all of the studies that support this conclusion used standardized tests. This is an important point, for these tests are not specifically designed to measure performance over time. Furthermore, they have characteristics which make them quite unsuitable for this purpose. For example, since they must serve the needs of teachers and pupils in many parts of the country, they are general in scope. They are also quite short, of a length that can be administered during one class period. Finally, they are usually designed to assess only certain facets of a subject — reading comprehension, reading vocabulary or speed of reading, not reading; computational arithmetic, arithmetic problem-solving, number concepts, not arithmetic; and so on. For this reason, we have to be careful not to assume that scores on a test of mechanical arithmetic tell us all we need to know about mathematical attainment or, indeed, that scores for one age or class level can be used as an index of achievement at every other class or age level.

The difficulties of comparison

The fundamental difficulty, however, is not the limitations of the tests, but the fact that if the results of the tests are to be used as a measure of changing performance, then we must ensure that the groups being compared are similar.

For example, if we wish to make a valid comparison of today's Form II pupils in terms of reading attainment with those of, say, 30 years ago, we must be aware that because of policies of social promotion today's Form II class will have a restricted age range but an increased range of ability. Some of the less able pupils in earlier times would have quietly disappeared from the school system, others would have been retained in Standard 4 or Form I. Today those less able pupils move through the system with their age peers and the age structure of Form II will be much more uniform, but the ability range will be much wider.

As we move up the school these changes are more striking. In 1940 only about 60 per cent of children went on to secondary school. Today almost 100 per cent do. In 1940 low achievers, for the most part, did not go to secondary school. Now many students, who would normally have left school at 15, stay on for a sixth, and even a seventh form year.

The racial composition of many of our school classes is also changing rapidly, particularly in our larger city schools and especially in Auckland. Whereas 40 years ago there would have been very few Maori or Pacific Island children to be seen, now, in some inner city schools, European children are the minority group.

The time factor

Then there is the problem of measuring achievement over time. A test devised for use in 1940 may not be very suitable for use in 1978 for a wide variety of reasons. For example, educational objectives will very likely have changed, if not in the broader aspects, then almost certainly in the specifics. Syllabus content may also change. Particular skills, specific knowledge, concepts to be developed may have shifted up or down several class levels, be given much more emphasis, de-emphasized or dropped altogether. For example, we now use metric measurements, so inches, yards and so on no longer apply. The fact is, of course, that tests are developed to faithfully mirror *current* aims and practices. If we want to assess student performance over time we need timeless tests, and our test developers have yet to construct any measures of this kind. Given the difficulties involved, they are not likely to either.

Classroom factors

We have to remember, too, that such things as class size and teacher quality will inevitably influence pupil performance. During the postwar years and up to about 1960 the size of classes increased, and so did school rolls, adding almost 153000 pupils to the system. And this period of rising enrolments coincided with a teacher shortage. It is reasonable to suggest that the quality of the teaching in our schools fell as a result. Now, of course, we are in, or rapidly moving towards, a period of declining school rolls and an over-supply of teachers. As a result, only the best of those who now come forward need to be selected for training, and with 3 year training, they should be able to do a better job. Another factor of some importance seems to be teaching style. A recent English study, described in this issue of *set*, suggests that formal methods of teaching produce greater mastery of basic skills than informal methods. If this is true, what are the implications for education in New Zealand and for the debate over falling standards? More to the point, what do we know about teaching styles in New Zealand? Have they changed in the last 20 or 30 years? Until we know

the answer to these questions it will be difficult to apply the research on teaching style and pupil progress to the New Zealand situation. And what about the effects of team teaching, open plan, the greater use of audio-visual aids in the classrooms, and so on?

Curriculum changes

Then there are the changes that have occurred in the subject matter of education. For example, the major upheaval in the mathematics curriculum, which has left many parents, employers and perhaps even some teachers utterly bewildered as to what the 'new maths' is all about. National English Syllabus Committee (NESC) English is becoming more readily acceptable to English teachers but there is no doubt that it would be considered revolutionary by those who received their instruction even 10 or 15 years ago. The science and social studies taught at school today bears little resemblance to that of two decades ago — and so it goes, with almost every subject in the curriculum and with the methods of teaching that subject.

Some might say that this is change for the sake of change but many educators would disagree. As the Director-General has taken pains to point out in defence of his teachers and departmental officers: they are people vitally concerned with standards; with finding new techniques of improved learning and raising levels of performance. He states:

> Let me say one thing clearly and emphatically. A concern for educational standards is a central concern of the teaching profession. It always has been. It is no less a central concern now than it ever was . . . But let no one think that the problems of low achievement would be beaten if only teachers worked harder at it, or if officers of my department once again advocated teaching methods that have rightly been discarded for good reason. (p. 8)

The social context

There are other major changes which have taken place in recent years which further complicate the task of comparing today's students with those of the past. The effects of these changes in society in many cases are only vaguely known or have not been fathomed at all. Some of the phenomena are relatively new in our country. The drift to the cities has accelerated. We suspect there have been changes in the family. Certainly solo parents are more common. What effects do these developments have? Is living in a large city more stressful for a child, or does it provide a greater range of learning opportunities? Do single parent families deprive the child of needed stimulus and support? There has been a policy of consolidation of rural schools since 1942. Has this change made provision for better quality education for country children? Do we really know?

Television has made its impact on our children (and on their teachers?). But the effects do not appear to be uniform — some are reported as negative, some positive. It has been cited as a substitute teacher and a surrogate parent; at the junior school level it is claimed by some to have improved children's language development. Yet, at the senior level, TV is seen to have a negative influence on homework, it competes with schooling and it is supposed to have turned children off reading that requires higher levels of comprehension.

There are doubtless many other factors at work, some probably not even suspected, which may well work against the making of valid assessments of educational performance over time. Like it or not, kids of today *are* different, they have a different world to learn to cope with, but that does not mean that they are worse!

Outside the school gates

If we turn our attention to school leavers and youth in the work force it becomes very clear that important changes have occurred, changes with a good deal of relevance to the debate over falling standards. In the earlier part of the century, say up until 1930 or so, many less able pupils left school and were employed in manual jobs which did not require any great levels of reading or computational skill. Today, there are fewer manual jobs of this kind and so pupils of like ability are either still at school or in employment, often in clerical jobs where basic skills are required. It would be true to say that these people, with modest academic achievements, are probably not sufficiently skilled for these positions. But what choice have they? And have they failed society or has society failed them? Furthermore, since the levels of literacy and numeracy required to even survive in our increasingly complex society appear to be steadily rising it may well be that those of below average ability will be less and less able to find jobs they can do and do with any degree of satisfaction.

Why haven't standards risen?

If we look at the kinds of input that have gone into New Zealand education in the last decade or more I think we are entitled to ask why all this has not shown up, very visibly, in improved achievement test scores. Consider just a few of the available statistics: 2 reading advisers in 1961, 22 in 1977; no maths advisers in 1961, 16 in 1977 and similar kinds of figures are available for the advisory service for science, rural schools, early childhood and so forth. The Curriculum Development Directorate did not exist in 1961; now it has a staff of 35 or so. In the last 10 years inspectors have taken on a greater advisory role, there has been a tremendous increase in in-service courses, a correspondence diploma course for teachers has been organized, and there have been many other improvements and innovations. I need hardly mention the size of the expenditure on education, or how it has increased in the last 20 years.

Maybe all of this time, energy and money has merely offset the effects of social changes, of the kind described earlier, enabling the schools to hold their ground but not to make any significant advances.

On the other hand, what attempts have been made to measure *all* the important outcomes of education? What do we know, for example, about children's reading habits, their speaking skills, their spatial ability, creativity, problem-solving skills, understanding of non-print media and so on? Maybe it is in these as yet unsurveyed areas that substantial learning is occurring and accelerated progress being made. We just don't know. And what about the

affective outcomes of education? What is happening in the area of personal values, interests and attitudes? Again, we just don't know. We are, in short, very poorly informed on a number of important matters; consequently, it is difficult to know if we have a problem let alone know if 'back to basics' is the solution we should adopt.

Back to where?

The first point to make about the 'back to basics' catch cry is that our schools have never abandoned basic instruction — if they had, who in our society would now be able to read, write and figure? So what do 'back to basics' advocates mean by basics? Some, of course, do literally mean the 3Rs — no more and no less, the school day to be devoted entirely to learning and practising these skills. Traditional methods only are to be used — in other words rote learning, and strict discipline is to be maintained. People who hold these views tend to see the school as an institution that has to be rigidly controlled and their real concern, it often appears, is not that the school teach the basics but that it be permitted to teach nothing else. Moreover, their philosophy is an extremely damaging and destructive one, for what does one do with the child of lesser gifts who, try as he or she may, cannot reach the 'basic' standard?

Others take a more liberal view of basics. The 3Rs are prominent but there is also a place for some knowledge of history, acquaintance with a foreign language, some knowledge of science and an appreciation of the role of the arts in the history of mankind. This, as it happens, is fairly close to the traditional view we have had in New Zealand of what constitutes a sound formal education and it is also the view taken by, for example, the American Council for Basic Education, established in 1956.

Finally, there are some who want the schools to inculcate obedience to authority, respect for the established social and economic order, and so on. Like those who advocate nothing but the 3Rs, they believe the schools can have an important effect on the attitudes and beliefs of young people and they want a curriculum that will ensure that pupils are exposed only to 'correct' ideas and opinions.

Basics, in short, is often a code word for political and social views that have little to do with education but a great deal to do with attitudes to social change, to democratic values, the rights of children and the concept of a plural society. So it is important, when you hear the word being used, to understand just what the user means. The other thing to remember is that society and the schools that are its reflection are by no means static. Not everything considered basic today was considered to be basic yesterday, and who knows what the generation of the year 2001 will regard as basic? One group's essentials are nearly always another's frills. Witness, for example, the debate over the introduction of Maori studies into our schools.

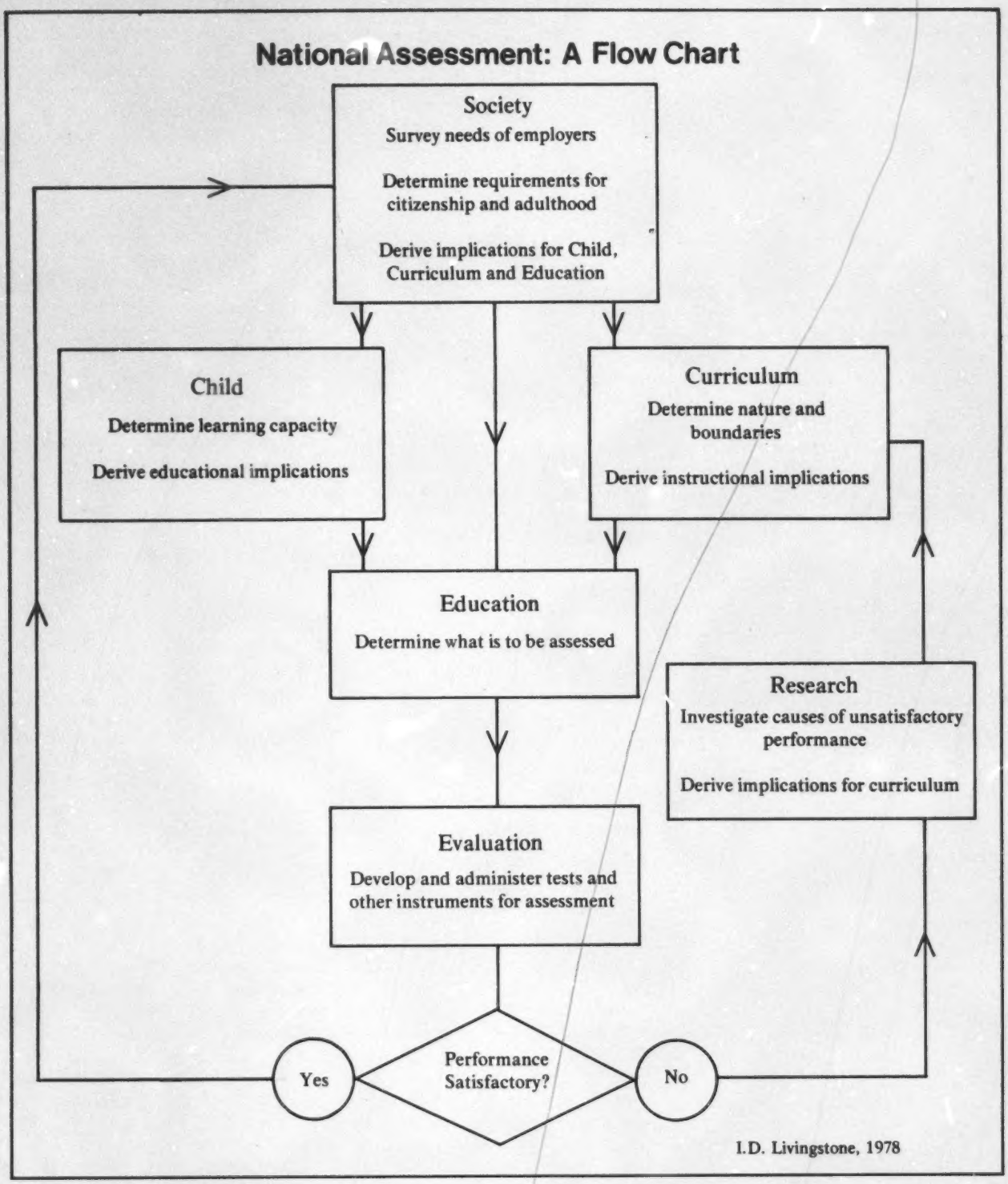
On the whole 'back to basics' is probably a rather simple-minded response to a complex set of educational and social problems, and I find myself in complete agreement with the Director-General of Education, Bill Renwick, who said recently:

> We are talking about problems that have baffled education systems for a very long time, problems that dedicated teachers in this and other countries are still wrestling with. Exhortation will not be enough. Destructive criticism will not do the trick: and no one can turn the clock back. Solutions will not be found by looking over our shoulders. They will be found only by pressing on with what teachers and researchers have been doing for a very long time — trying to find the causes of failure or unsatisfactory performance and then find workable answers. (p. 9)

National assessment

So one solution, perhaps the best solution, is to foster research into the causes of failure or unsatisfactory performance. At the same time, many can see value in measuring the effectiveness of the educational system by regularly assessing national levels of attainment. This, of course, is no new idea and it was fully considered by the Commission on Education (The Currie Commission) at the beginning of the 1960s. At that time, incidentally, the Commission expressed little sympathy for those who advocated an atmosphere of 'unquestioning obedience', who considered achievement in the three Rs the sole criterion of success or who were 'unable to accept the cardinal ideas of variation in ability and attainment and would withhold a child from progress through the system until he had reached each year some fixed level or standard of attainment'. (pp. 27-28) Nonetheless, the Commission thought that regular measurement of attainment levels was desirable, and one of the major recommendations was that the Department of Education, preferably through NZCER, take steps to prepare and administer nationally standardized tests at five-yearly intervals in the basic subjects at specific points of the primary and secondary courses. It considered that regular evaluations of this kind would provide an answer to public anxiety by establishing standards against which national achievement in the basic subjects may be seen as 'advancing or receding'. The Commission also recommended the establishment of three 'checkpoints' at crucial stages in a child's school career: Standard I, Standard 4 and Form II. Standardized achievement tests were to be administered systematically and compulsorily so that teachers could assess each child's progress in the basic subjects. These checkpoints were not viewed by the Commission as 'standards' or 'examination barriers' as in the old Proficiency days, but as a monitoring procedure. Other counsel prevailed, however, and in 1963 this second proposal was modified so that nationally standardized tests would be made available on an optional basis at all class levels from Standard 1 upwards. NZCER was approached by the Government to undertake the construction of these tests and in 1965 agreed to do so. The *Progressive Achievement Test* series was the result, the first tests being made available to schools in 1969. The first proposal has never been implemented although to some extent the periodic checks on norms for the *PAT* tests provide some of the information which such surveys would yield.

But the fact remains that, *PAT* data to one side, New Zealand educators do not have the reliable and objective information needed to answer the concerned layman's query: 'Are scholastic standards failing?' And the only way one can get that kind of data is by setting in motion extensive, well-planned and systematic national surveys to monitor what is happening in our schools. There



are a number of overseas models, the National Assessment of Educational Progress (NAEP) and Project Talent in the United States, the British and Scottish surveys and others in individual American, Australian and Canadian states, that New Zealand can profitably use as examples, and learn from, avoiding the errors that have been made by others elsewhere. And the method, at least on paper, is quite straight-forward. Committees of teachers, curriculum advisers, employers and so on, probably one for each subject if not each level of education, draw up a list of skills, understandings, attitudes and objectives that they consider constitute the minimum level of attainment for participation in adult society, successful employment and so forth. This list is then turned over to the test developers, who devise the tests and other instruments that show how many children exceed the stated criteria, how many fall short of them, and so on. In 5 or 10 years, when the exercise is repeated again, the criteria may have changed, of course, but they will be revised so as to be appropriate for that

particular period of time and the measures too will also be revised to faithfully reflect the current criteria of concern to the various committees.

Now these kinds of programmes cost money. The NAEP investigations started with an annual budget of something like $4 million and in 9 years over $40 million has been spent; a recent Australian literacy-numeracy survey cost $117,000. On the other hand, NZCER calculated in 1975 that a comprehensive programme of regular national assessements in the basic subjects could be carried out in New Zealand for an annual cost of around $50,000. Because of inflation this figure would need to be revised, of course, but it would, even now, be only a fraction of the cost of comparable overseas investigations.

But even if national assessment were to cost $100,000 a year, isn't that a trifling amount by comparison with the $800 million we annually spend on education? Most reasonable people would be glad to support expenditure on a programme of national assessment if it meant we could determine the effectiveness of new policies and practices, identify undesirable trends early and, in general, monitor the return we are getting for this quite colossal sum.

And shouldn't we be sure of our facts before we start talking about falling standards and the need to return to basics? It is, after all, the education of our children that we are talking about.

Footnotes

1. A standardized test is one which contains a specified set of questions, includes explicit and standardized instructions for administration and scoring and has been given to a representative sample of individuals for the purpose of securing normative data to be used in the interpretation of individual scores.

2. Regulations Defining Standards of Education, and for Inspection of Schools, 24 September 1878. Copies available from *set*.

References and Further Reading

A short but excellent overview of the New Zealand research on levels of attainment in literacy and numeracy is provided by Elley, W.B. (1976). 'Are Our Standards of Literacy Falling?' *Education*, Vol. 25, No. 6, pp. 3-9. For the historical background to the standards debate see Ewing, J.L. (1970). *The Development of the New Zealand Primary School Curriculum, 1877-1970*. Wellington: NZCER. The quotations by Renwick come from Renwick, W.L. (1977). *Standards in Education*. Address to the Rotary Club of Napier. Mimeo. Wellington: Department of Education. Reprinted in *Educational News*, Vol. 3, No. 11, pp. 1, 11. Portion reprinted *National Education*, Vol. 60, No. 630, pp. 3-5. For an earlier but still influential view on standards see Mason, H.G.R. (1944). *Education Today and Tomorrow*. Wellington: Government Printer.

The New Zealand investigations mentioned in the text are as follows:

Brownrigg, C.A. (1976). *The Deterioration in Mechanical Arithmetic of 13 Year Old Pupils Since 1956*. Unpublished Dip. Ed. Thesis, Massey University.

Clark, M.J. (1977). *An Investigation into the New Zealand Forms I-IV Mathematics Syllabus*. Unpublished MA Thesis, Victoria University of Wellington.

Department of Education (1959, 1965). *Annual Reports*. (E.1). Wellington: Government Printer.

Department of Education (1975). *Evaluation of Teaching Mathematics in Primary Schools*. Wellington: Government Printer.

Department of Education (1975). *Handbook on School Administration*, Wellington: Government Printer.

Elley, W.B. (1969). 'Changes in Mental Ability in New Zealand School Children.' *New Zealand Journal of Educational Studies*, Vol. 4, No. 2, pp. 140-155.

Elley, W.B. and Reid, N.A. (1969). *Progressive Achievement Tests of Reading*. Wellington : NZCER.

Elley, W.B. and Reid, N.A. (1971). *Progressive Achievement Tests of Listening Comprehension*. Wellington: NZCER.

Fieldhouse, A.E. (1955). 'How Good are Scholastic Standards in Our Schools?' *National Education*, Vol. 37, No. 397, pp. 41-43.

Fieldhouse, A.E. (1956). 'Mechanical Arithmetic Standards in New Zealand.' *National Education*, Vol. 38, No. 416, pp. 373-375.

Francis, C. (1948). *Spelling Survey: An Examination into the Spelling Ability of a Representative Group of Christchurch Children*. Unpublished Dip. Ed. Thesis, University of Canterbury.

Freyberg, P.S. (1973). 'Changes in Spelling Performance of Standard Three Children 1960-72.' *New Zealand Journal of Educational Studies*, Vol. 8, No. 2, pp. 160-164.

Hounsell, J.D. (1967). *An Investigation into the Relationship Between Intelligence and Attainment of Army National Servicemen*. Unpublished Dip. Ed. Thesis, Massey University.

Jackson, P.F. (1977). *Interim Report on the Development of a Study Habits and Attitudes Inventory*. Unpublished Report, NZCER.

Nicholson, C.J. (1973). *Spelling of Auckland Primary School Children: A Comparative Survey of the Frequency of Spelling Errors of Two Samples of Pupils in 1952 and 1969-70*. Unpublished MA Thesis, University of Auckland.

Reid, N.A. (1975). 'Do the *PAT: Reading Tests* Require Re-norming?' *NZCER Newsletter*, Vol. 7, No. 1, pp. 2-3.

Reid, N.A. (1978). 'Listening Comprehension: 7-Year Follow-Up.' *NZCER Newsletter*, Vol. 10, No. 1, p. 2.

Reid, N.A. and Hughes, D.C. (1974). *Progressive Achievement Tests of Mathematics*. Wellington: NZCER.

Spence, R.J. (1976). Personal communication.

Watson, J.E. (1964). *Intermediate Schooling in New Zealand*. Wellington: NZCER.

Winterbourn, R. (1932). 'School Spelling' *National Education*, Vol. 14, pp. 461-463.

Full descriptions of the international studies of subject areas which have involved New Zealand pupils are to be found in the following reports of the International Association for the Evaluation of Educational Achievement (IEA).

Carroll, J.B. (1975). *The Teaching of French as a Foreign Language in Eight Countries.* New York: John Wiley and Sons.

Comber, L.C. and Keeves, J.P. (1973). *Science Education in Nineteen Countries.* New York: John Wiley and Sons.

Purves, A.C. (1973). *Literature Education in Ten Countries.* New York: John Wiley and Sons.

Thorndike, R.L. (1973). *Reading Comprehension in Fifteen Countries.* New York: John Wiley and Sons.

Torney, J.V. et al. (1975). *Civic Education in Ten Countries.* New York: John Wiley and Sons.

A brief summary of the findings of these surveys as they apply to New Zealand can be found in Phillipps, R.W. (1976). 'IEA — International Standards of Acheivement.' *Education,* Vol. 25, No. 6, pp. 10-11. For a critical viewpoint see Reid, N.A. (1976). 'The IEA Studies' *Education,* Vol. 25, No. 10, pp. 20-21.

For a selection of overseas opinion on the question of falling standards see:

Benford, M. (1977). 'The Myths of Monitoring.' *Times Educational Supplement,* October, pp. 18-19.

Cookson, C. (1978). 'Testing, Testing, Testing.' *Times Educational Supplement,* 10 February, p. 15.

Ebel, R.L. (1976). 'Declining Scores: A Conservative Explanation.' *Phi Delta Kappan,* Vol. 58, No. 4, pp. 306-310.

Gonder, P. (1976). 'The Good News in Reading.' *American Education,* Vol. 12, No. 10, pp. 14-17.

Harmischfeger, A. and Wiley, D. (1976). 'Achievement Test Scores Drop. So What?' *Educational Researcher,* Vol. 5, No. 3, pp. 5-12.

Leonard, M. (1976). 'Down With Standards.' *Times Educational Supplement,* 30 January, pp. 21-22.

Marlowe, J. (1976). 'Testing, Testing . . . Can You Hear Me?' *Phi Delta Kappan,* Vol. 58, No. 3, pp. 256-257.

Raybin, R. (1977). 'Minimum Proficiencies in Pasadena's Secondary Schools.' *Phi Delta Kappan,* Vol. 59, No. 2, pp. 128-130.

Rogers, V.R. and Baron, J. (1976). 'Declining Scores: A Humanistic Explanation.' *Phi Delta Kappan,* Vol. 58, No. 4, pp. 311-313.

Shane, H.G. (1977). 'An Interview with W. Willard Wirtz — The Academic Score Decline: Are Facts the Enemy of Truth?' *Phi Delta Kappan,* Vol. 59, No. 2, pp. 83-86.

A wide range of viewpoints on basics, of both New Zealand and overseas origin, can be found in the following:

Aitken, R. (1978). 'Back to Basics?' *English in New Zealand,* April, pp. 4-9.

Brodinsky, B. (1977). 'Back to the Basics: The Movement and its Meaning.' *Phi Delta Kappan,* Vol. 58, No. 7, pp. 522-527.

Down, A.G. (1977). 'Why basic education?' *The National Elementary Principal,* October, pp. 28-32.

Foshay, A.W. (1977). 'What's Basic About the Curriculum?' *Language Arts,* Vol. 57, No. 6, pp. 616-624.

Goodwin, J.W. (1977). 'Back-to-the-Basics is Schooling, Not Education', *National Education,* Vol. 59, No. 629, pp. 193-194.

Hogan, R.F. and Judy, S. (1976). 'The 'Back to Basics' Controversy.' *Media and Methods,* Vol. 13, No. 1, pp. 17-18, 54.56.

Jarrett, J.L. (1977). 'I'm for Basics, But Let Me Define Them.' *Phi Delta Kappan,* Vol. 59, No. 4, pp. 235-239.

Jennings, W. and Nathan, J. (1977). 'Startling/Disturbing Research on School Program Effectiveness.' *Phi Delta Kappan,* Vol. 58, No. 7, pp. 568-577.

Lemke, A. (1977). 'Which Basics?' *The Clearing House,* September, pp. 14-16.

Nyberg, V.R. (1977). 'Testing Whom for What?' *Education Canada.* Vol. 17, No. 4, pp 18-21.

Rowan, P. and Rodgers, L. (1977). 'Yes to Testing, Flogging and Grammars: No — to Core Curriculum, Parent and Pupil Power.' *The Times Educational Supplement,* 2 September, p. 6.

Winterowd, W.R. (1977). 'A Teacher's Guide to the Real Basics.' *Language Arts,* Vol. 54, No. 6, pp. 625-630.

Zavos, S. (1978). 'Back to Basics.' *Listener,* 4 February, p. 6.

The following are reports on national assessment programmes:

Flanagan, J.C. (1976). 'Changes in School Levels of Achievement: Project TALENT Ten and Fifteen Year Retests.' *Educational Researcher,* Vol. 5, No. 8, pp. 9-12.

Keeves, J.P. and Bourke, S.F. (1976). *Literacy and Numeracy in Australian Schools: A First Report. Australian Studies in School Performance. Volume I.* Canberra: Australian Government Publishing Service.

Bourke, S.F. and Lewis, R. (1976). *Literacy and Numeracy in Australian Schools: Item Report. Australian Studies in School Performance. Volume II.* Canberra: Australian Government Publishing Service.

Bourke, S.F. and Keeves, J.P. (eds.) (1977). *The Mastery of Literacy and Numeracy: Final Report. Australian Studies in School Performance. Volume III.* Canberra: Australian Government Publishing Service.

National Assessment of Educational Progress. (1974). *General Information Yearbook: National Assessment of Educational Progress.* Washington, D.C.: Government Printing Office.

Scottish Council for Research in Education. (1968). *Rising Standards in Scottish Primary Schools, 1953-63.* Edinburgh: SCRE.

Start, K.B. and Wells, B.K. (1972). *The Trend of Reading Standards.* Slough, England: NFER.

Readers interested in the problems of national assessment will also want to consult Sumner, R. (ed.); (1977). *Monitoring National Standards of Attainment in Schools.* Slough, England: NFER.

First issued in *set 78 number one.* Copyright, New Zealand Council for Educational Research, Wellington, 1978.